



July 23, 2012

BIO-MICROBICS, INC.
ALLISON BLODIG
8450 COLE PKWY.
SHAWNEE KS 66227

Re: Description: SEWAGE TREATMENT APPARATUS (Tier 3- downsizing & vertical separation credit)
Manufacturer: BIO-MICROBICS, INC.
Product Name: MICROFAST® (consolidates 7 files- 20080170, 171, 172, 173 and 20080358, 20110052 & 20110301)

Model Number(s): 0.5, 0.75, 0.9, 1.5, 3.0, 4.5, and 9.0

Description: Submerged Fixed Film Aerated Treatment System using attached and suspended growth

[FOR PERFORMANCE AND DESIGN PARAMETERS, OR MAINTENANCE, INSPECTION AND PUMPING REQUIREMENTS, SEE ATTACHMENT D. FOR MANUFACTURER'S MANUALS, SEE ATTACHMENTS A, B & C.]

Product File No: 20120242

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. **This approval is valid until the end of AUGUST 2013.**

This approval is contingent upon compliance with the following stipulation(s):

- This product must be sized based on daily wastewater flow (gallons per day). The gallons per day value must be at least 150 gallons per day per bedroom.
- Installation and servicing of this product must be in accordance with the manufacturer's instructions. A copy of the manufacturer's installation and servicing instructions must be given to the owner of the system.
- This product must be installed in sewage treatment tanks approved by the Department of Safety & Professional Services, Division of Safety and Buildings for use with this product.
- When this product receives wastewater from dwellings, it will produce an effluent quality with a maximum monthly average value for BOD5 of less than or equal to 30 mg/L, TSS of less than or equal to 30 mg/L TSS and F.O.G. of less than 30 mg/L and fecal coliform of less than or equal to 10,000 cfu/100mL.
- Approval is issued for this product because the design of the product meets the intent of s. SPS 383.15 (6), Wis. Adm. Code that requires other types of sewage treatment tanks be constructed in accordance with s. SPS 383.20, Wis. Adm. Code. The intent of the code is met because this product is expected to provide an acceptable means of treating wastewater when it is installed in a properly designed tank.

- Based on testing data submitted and reviewed by the department, this approval recognizes that this plumbing product will reduce the concentration of Total Kjeldal Nitrogen (TKN) up to 70%.
- When dosing MicroFast® units, a dosing schedule that delivers a maximum 1/24th (4.167%) of the design flow rate for the unit in any one hour period is suggested. This schedule also applies to any fraction of an hour.
- AS OF MARCH 1, 2009 ALL ELECTRICAL CONNECTIONS FOR PRIVATE SEWAGE SYSTEMS MUST COMPLY WITH S. SPS 316.300 (FORMERLY S. COMM 16.300) WIRING METHODS.
- This product must be installed in state-approved sewage treatment tanks approved this department for use with this product.
- For department approved tanks, see listing on-line at [http://dsps.wi.gov/php/sb-ppalopp/prodcode_result.php/STATS/SEWAGE_TREATMENT_APPARATUS_&_TANK_SYSTEM_\[SEE_STA_-_SEWAGE_TREATMENT_APPARATUS_\]](http://dsps.wi.gov/php/sb-ppalopp/prodcode_result.php/STATS/SEWAGE_TREATMENT_APPARATUS_&_TANK_SYSTEM_[SEE_STA_-_SEWAGE_TREATMENT_APPARATUS_])
- **Additional information is included as attachment(s) to this letter; see attachment A, B, C and D.**

This approval supersedes the approvals issued for separate files. This approval consolidates 7 files, (20080170, 171, 172, 173 and 20080358, 20110052 & 20110301) with various approval and expiration dates

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Jean M. MacCubbin, CST
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Attachments A, B, C & D